

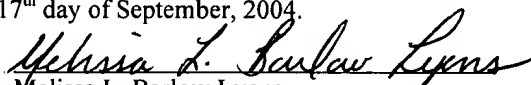
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ya Fang Liu  
Serial No: 09/886,964  
Confirmation No: 6742  
Filed: June 21, 2001  
For: MLK INHIBITORS FOR TREATMENT OF  
NEUROLOGICAL DISORDERS  
Examiner: Jon P. Weber  
Art Unit: 1651

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**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to MAIL STOP Duplicates, Crystal Plaza 2, Room 7D25, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the 17<sup>th</sup> day of September, 2004.

  
Melissa L. Barlow Lyons

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**MAIL STOP Duplicates**  
**Crystal Plaza 2, Room 7D25**  
Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

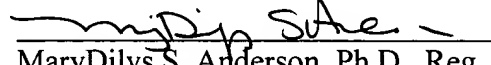
Transmitted herewith are the following documents:

- **COPY of Transmittal and Postcard Submitted on April 8, 2004**
- **COPY of Information Disclosure Statement Submitted on April 8, 2004**
- **COPY of PTO Form 1449 Submitted on April 8, 2004**
- **COPY of two (2) cited references Submitted on April 8, 2004**
- **Return Receipt Postcard**

Per request of Shirley Steele at the United States Patent and Trademark Office, we are submitting the above copies of an IDS, PTO Form 1449, and two references previously filed on April 8, 2004. If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617) 646-8000, Boston, Massachusetts.

A check is not required and it therefore not enclosed. A duplicate of this sheet is enclosed.

Respectfully submitted,  
*Ya Fang Liu, Applicant*

By:   
MaryDilys S. Anderson, Ph.D., Reg. No.: 52,560  
Wolf, Greenfield & Sacks, P.C.  
600 Atlantic Avenue  
Boston, Massachusetts 02210-2206  
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Docket No.: L0624.70001US00  
Date: September 17, 2004  
xNDDx

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ya Fang Liu  
Serial No: 09/886,964  
Confirmation. No.: 6742  
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DISORDERS  
Examiner: Jon P. Weber  
Art Unit: 1651

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The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the 8<sup>th</sup> day of April, 2004.

  
Melissa L.B. Lyons

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Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

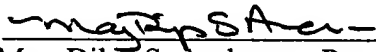
Transmitted herewith are the following documents:

- ☒ Copy of Applications 10/042,614 and 10/360,463
- ☒ Information Disclosure Statement
- ☒ PTO Form 1449 with cited references
- ☒ Return Receipt Postcard

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617) 720-3500, Boston, Massachusetts.

A check is not enclosed. If a fee is required, the Commissioner is hereby authorized to charge Deposit Account No. 23/2825. A duplicate of this sheet is enclosed.

Respectfully submitted,  
*Ya Fang Liu, Applicant*

By:   
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Docket No. L0624.70001US00  
Date: April 8, 2004  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ya Fang Liu  
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Art Unit: 1651

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Melissa L.B. Lyons

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

STATEMENT FILED PURSUANT TO THE DUTY OF  
DISCLOSURE UNDER 37 CFR §§1.56, 1.97 AND 1.98

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, the Applicant requests consideration of this Information Disclosure Statement.

PART I: Compliance with 37 C.F.R. §1.97

This Information Disclosure Statement has been filed before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. §1.114.

No fee or certification is required.

**PART II: Information Cited**

The Applicant hereby makes of record in the above-identified application the information listed on the attached form PTO-1449 (modified). The order of presentation of the references should not be construed as an indication of the importance of the references.

The Applicant hereby makes the following additional information of record in the above-identified application.

The applicant would like to bring to the Examiner's attention the following co-pending applications that may contain subject matter related to this application:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Inventor(s)</u>
09/156,367	September 17, 1998	Ya Fang Liu
10/042,614	January 9, 2002	Ya Fang Liu
10/360,463	February 5, 2003	Ya Fang Liu

**PART III: Remarks**

Documents cited anywhere in the Information Disclosure Statement are enclosed unless otherwise indicated. It is respectfully requested that:

1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;
2. The enclosed form PTO-1449 be signed by the Examiner to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application;
3. The citations for the information be printed on any patent which issues from this application.

By submitting this Information Disclosure Statement, the Applicant makes no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

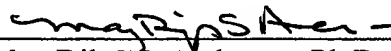
By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicant, the Examiner is urged to form his own conclusion regarding the relevance of the cited information.

An early and favorable action is hereby requested.

Respectfully submitted,  
Ya Fang Liu, *Applicant*

By:   
MaryDilys S. Anderson, Ph.D., Reg. No. 52,560  
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600 Atlantic Avenue  
Boston, Massachusetts 02210-2211  
Telephone: (617) 720-3500

Docket No. L0624.70001US00  
Date: April 8, 2004  
**XNDDX**

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Sheet 1 of 3

APPLICATION NO.: 09/886,964

ATTY. DOCKET NO.: L0624.70001US00

FILING DATE: June 21, 2001

CONFIRMATION NO.: 6742

APPLICANT: Ya Fang Liu

GROUP ART UNIT: 1651

EXAMINER: Jon P. Weber

**U.S. PATENT DOCUMENTS**

Examiner's Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or of issue of Cited Document MM-DD-YYYY
		Number	Kind Code		
	BW*	4,980,281		Gerard M. Housey	12-25-1990
	BX*	5,385,915		Joseph D. Buxbaum et al.	01-31-1995
	BY*	5,461,146		Michael E. Lewis et al.	10-24-1995
	BZ*	5,468,872		Marcie A. Glicksman et al.	11-21-1995
	CA*	5,475,110		Robert L. Hudkins et al.	12-12-1995
	CB*	5,516,772		Marcie A. Glicksman et al.	05-14-1996
	CC*	5,534,426		Michael Karin et al.	07-09-1996
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	CF*	5,593,884		Michael Karin et al.	01-14-1997
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	CO*	6,514,745	B1	Michael Karin et al.	02-04-2003

**FOREIGN PATENT DOCUMENTS**

Examiner's Initials	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document (not necessary)	Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)
		Office/ Country	Number	Kind Code			
	CP*	CA	2,148,898		The General Hospital Corporation et al.	05-08-1995	
	CQ*	WO	93/15201		New England Deaconess Hospital	08-05-1993	
	CR*	WO	94/17498		Enco-Tone Ltd.	08-04-1994	
	CS*	WO	95/03324		The Regents of the University of California	02-02-1995	
	CT*	WO	95/23849		The Children's Hospital of Philadelphia	09-08-1995	
	CU*	WO	99/58982		Ya Fang Liu	11-18-1999	
	CV*	WO	00/13015		Cephalon, Inc.	03-09-2000	
	CW*	WO	00/47583		Cephalon, Inc.	08-17-2000	
	CX*	WO	02/14536		Cephalon, Inc.	02-21-2002	

**OTHER ART — NON PATENT LITERATURE DOCUMENTS**

Examiner's Initials	Cite No	Include name of the author (in CAPITAL LETTERS) title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, relevant page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
	<b>CY*</b>	Angeles, T. et al., Enzyme-linked Immunosorbent Assay for trkA Tyrosine Kinase Activity. Analytical Biochemistry, 236: 49-55, 1996.	
	<b>CZ*</b>	Bergeron et al., Inhibition of Cell Growth by Overexpression of the ZPK Gene. Biochemical and Biophysical Research Communications, 231:153-155, 1997.	
	<b>DA*</b>	Blouin et al., Cell-Specific Expression of the ZPK Gene in Adult Mouse Tissues. DNA and Cell Biology, 15: 631-642, 1996.	
	<b>DB*</b>	Davis, R.J., Human JNK3 Alpha 2 Protein Kinase (JNK3A2) mRNA. GenBank Accession No. U34819, July 25, 1996.	
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	<b>DF*</b>	Dorow et al., Identification of a new family of human epithelial protein kinases containing two leucine/isoleucine-zipper domains. Eur. J. Biochem, 213:701-710, 1993.	
	<b>DG*</b>	Ezoe et al, PTK1, a novel protein kinase required for proliferation of human melanocytes. Oncogene, 9:935-938, 1994.	
	<b>DH*</b>	Fan et al., Dual Leucine Zipper-bearing Kinase (DLK) Activates p46SAPK and p38mapk but not ERK2. Journal of Biological Chemistry, 271:24788-24793, 1996.	
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	<b>DJ*</b>	Glicksman et al., CEP-1347/KT7515 Prevents Motor Neuronal Programmed Cell Death and Injury-Induced Dedifferentiation In Vivo. Journal of Neurobiology. 34: 361-370, 1998.	
	<b>DK*</b>	Glicksman et al., K-252a and Staurosporine promote Choline Acetyltransferase Activity in Rat Spinal Cord Cultures. Journal of Neurochemistry, 61:210-221, 1993.	
	<b>DL*</b>	Hambleton et al., Activation of c-Jun N-terminal kinase in bacterial lipopolysaccharide-stimulated macrophages. Proc. Natl. Acad. Sci. USA, 93: 2774-2778, 1996.	
	<b>DM*</b>	Hirai et al., Activation of the JNK pathway by distantly related protein kinases, MEKK and MUK. Oncogene, 12: 641-650, 1996.	
	<b>DN*</b>	Holzman et al., Identification, Molecular Cloning, and Characterization of Dual Leucine Zipper Bearing Kinase. Journal of Biological Chemistry, 269: 30808-30817, 1994.	
	<b>DO*</b>	Hu et al., Human HPK1, a novel human hematopoietic progenitor kinase that activates the NJK/SAPK kinase cascade. Genes and Development, 10: 2251-2264, 1996.	
	<b>DP*</b>	Ing et al., MLK-3: identification of a widely-expressed protein kinase bearing an SH3 domain and a leucine zipper-basic region domain. Oncogene, 9:1745-1750, 1994.	
	<b>DQ*</b>	Kaneko et al., Neurotrophic 3, 9-bis (alkylthio)methyl - and - bis(alkoxymethyl) -K- 252a Derivatives. J. Med. Chem. 40: 1863-1869, 1997.	
	<b>DR*</b>	Katoh et al., Cloning and Characterization of MST, a novel (putative) serine/threonine kinase with SH3 domain. Oncogene, 10: 1447-1451, 1995.	
	<b>DS*</b>	Kiefer et al., HPK1, a hematopoietic protein kinase activating the SAPK/JNK pathway. EMBO Journal, 15: 7013-7025, 1996.	
	<b>DT*</b>	Knight, E. et al., A Radioactive Binding Assay for Inhibitors of trkA Kinase. Analytical Biochemistry, 247: 376-381, 1997.	
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	<b>DY*</b>	Nagata et al., The MAP kinase kinase MLK2 co-localizes with activated JNK along microtubules and associates with kinesin superfamily motor KIF3. EMBO Journal, 17: 149-158, 1998.		
	<b>DZ*</b>	Park et al., Ordering the Cell Death Pathway. J. Biol. Chem. 271(36): 21896-21905, 1996.		
	<b>EA*</b>	Phelps et al., Generation Patterns of Four Groups of Cholinergic Neurons in Rat Cervical Spinal Cord: A Combined Tritiated Thymidine Autoradiographic and Choline Acetyltransferase Immunocytochemical Study. Journal of Comparative Neurology, 273: 459-472, 1998.		
	<b>EB*</b>	Pombo et al., Activation of the SAPK pathway by the human STE20 homologue germinal centre kinase. Nature, 377: 750-754, 1995.		
	<b>EC*</b>	Qin et al., Nuclear Factor- $\kappa$ B Contributes to Excitotoxin-Induced Apoptosis in Rat Striatum. Molecular Pharmacology, 53: 33-42, 1998.		
	<b>ED*</b>	Reddy et al., Cloning of a Novel Putative Protein Kinase Having a Leucine Zipper Domain From Human Brain. Biochemical and Biophysical Research Communication, 202: 613-620, 1994.		
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	<b>EF*</b>	Sells et al., Emerging from the Pak: the p21-activated protein kinase family. Trends in Cell Biology, 7: 162-167, 1997.		
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	<b>EH*</b>	Su et al., NIK is a new Ste20-related kinase that binds NCK and MEKK1 and activates the SAPK/JNK cascade via a conserved regulatory domain. The EMBO Journal, 16: 1279-1290, 1997.		
	<b>EI*</b>	Tung et al., A novel human SPS1/STE20 homologue, KHS, activates Jun N-terminal kinase. Oncogene, 14:653-659, 1997.		

EXAMINER

DATE CONSIDERED

#EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. 09/156,367, filed September 17, 1998, and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

[NOTE - Must provide a copy of any patent, publication, other information listed, even if it was previously submitted to, or cited by, the U.S. Patent Office in an earlier application, unless the earlier application is identified by the IDS and is relied upon for an earlier filing date under 35 U.S.C. §120, and the copy was provided in the earlier application.]